

2010-02-09 General Mu2e meeting

Tuesday, February 09, 2010

9:14 AM

- Email

- We will hold a Mu2e Accelerator General Meeting tomorrow, Tuesday, Feb 9, at 10:00 a.m. in the WH1E Conference Room. These meetings are now being held roughly every four weeks.
- Tuesday's Tentative Agenda:
 - L2/3 Management Report, Mike (10 min)
 - Syphers, pellico, kourbanis, werkema, leveling, michelotti, moore, johnstone, prebys, coleman
 - WBS is forming.
 - Operating Scenario and RF calculations, Mike/Chandra (10 min)
 - momentum stacking
 - bunch formation
 - Beam Line Efforts Report, Sasha/Carol (15 min)
 - latest layout
 - extinction channel design
 - Extraction Efforts Report, Leo (10 min)
 - simulations and studies
 - RF-KO
 - Any Other Short Announcements, All (15 min)
 - To join remotely:
 - Phone Number: 510-665-5437
 - Meeting ID: 6823 (no password)
 - Proposed Agenda for Next Meeting:
 - Reports on --
 - Extinction Efforts
 - Rad Safety Issues and Efforts
 - Target Station Issues and Efforts

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- Current Design - Syphers

- Hybrid A: thread between NOvA fills
 - 3 booster batches, single pass through Rr, to accumulator
 - 4e12 per
 - 4 bunches into Debuncher and individually slow spilled
 - 3e12 per bunch, tune shift 0.025
 - Experiment 34M per micro bunches
 - Total 18Tp/s
- Hybrid B: thread between NOvA fills
 - Or, you could take 2 at a time to the accumulator, 3x
 - Same rate to experiment, space change down (tune shift 0.017).
 - Duty factor to experiment down a bit
- Stacking and bunch formation time

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- Mu2e website: <http://mu2e.fnal.gov/>
- Doc database: <http://mu2e-docdb.fnal.gov/>

- DC Beam Collimation in Mu2e - Sasha Drozhdin
 - Shows beam line betas and dispersion
 - Kicker, dump 1, dump 2, kicker
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- Extraction - Leo
 - Five in extraction group...steve, vladimir, john johnstone
 - Originally thought spill would be done by collapsing separatrix
 - Looking into 1/2 integer or 1/3 integer extraction.
 - RF knockout, introduction an oscillating E field to gently blow up the beam.
 - E field controlled via amplitude and frequency
 - Have only done this with 3rd integer resonance.
 - Machine studies
- Meet again in 4 weeks.